

Monitoring Data Record

Project Title: B-3157 (Michael's Branch Site) COE Action ID: 200020843

WQC Number: 3467

Stream Name: Michael's Branch

City, County and other Location Information: Davidson County, Bridge #74 & #76 over SR 1242 and Michael's Branch and approaches on US 29/64/70 & I-85 Business.

Date Construction Completed: 9/5/07 Monitoring Year: (3) of 5

Ecoregion: _____ 8 digit HUC unit 03040103

USGS Quad Name and Coordinates: _____

Rosgen Classification: _____

Length of Project: 876' Urban or Rural: Urban Watershed Size: _____

Monitoring DATA collected by: M. Green and J. Young Date: 3/1/10

Applicant Information:

Name: NCDOT Roadside Environmental Unit

Address: 1425 Rock Quarry Road Raleigh, NC 27610

Telephone Number: (919) 861-3772 Email address: mlgreen@ncdot.gov

Consultant Information:

Name: _____

Address: _____

Telephone Number: _____ Email address: _____

Project Status: Complete

Monitoring Level required by COE and DWQ (404 permit/ 401 Cert.): Level (1) ~~2~~ ~~3~~

Monitoring Level 1 requires completion of *Section 1, Section 2 and Section 3*

Permit States: The permittee shall perform the following components of Level I monitoring each year for the 5-year monitoring period: Reference photos; plant survival (i.e., identify specific problem areas (missing, stressed, damaged or dead plantings), estimated causes, and proposed/required remedial action); visual inspection of channel stability. Physical measurements of channel stability/morphology will not be required. The permittee shall submit the monitoring reports to the Corps of Engineers, Raleigh Regulatory Field Office Project Manager, within sixty days after completing the monitoring. If less than two bankfull events occur during the first 5 years, the permittee shall continue monitoring until the second bankfull event is documented. The bankfull events must occur during separate monitoring years. In the event that the required bankfull events do not occur during the five-year monitoring period, the Corps of Engineers, in consultation with the resource agencies, may determine that further monitoring is not required. It is suggested that all bankfull occurrences be monitored and reported through the required monitoring period. The permittee shall perform and submit photo documentation twice each year (summer and winter) for the 5-year monitoring period, and for any subsequently required monitoring period.

Section 1. PHOTO REFERENCE SITES

(Monitoring at all levels must complete this section)

Total number of reference photo locations at this site:

10 photos were taken from 5 photo point locations

Dates reference photos have been taken at this site: 1/23/08, 8/15/08, 3/12/09, 8/10/09, 3/1/10

Individual from whom additional photos can be obtained (name, address, phone): _____

Other Information relative to site photo reference: A site map with photo point locations is included with this report.

If required to complete Level 3 monitoring only stop here; otherwise, complete section 2.

Section 2. PLANT SURVIVAL

Attach plan sheet indicating reference photos.

Identify specific problem areas (missing, stressed, damaged or dead plantings):

Estimated causes, and proposed/required remedial action: _____

ADDITIONAL COMMENTS: Planted vegetation is surviving along the streambank and within the buffer area. Streambank reforestation included black willow, tag alder, elderberry, water oak, sycamore, yellow poplar, and green ash. Other vegetation noted: red maple, sweetgum, cattails, *Juncus* sp., jewelweed, tearthumb, lespedeza, and various grasses.

If required to complete Level 1 and Level 2 monitoring only stop here; otherwise, complete section 3.

Section 3. CHANNEL STABILITY

Visual Inspection: The entire stream project as well as each in-stream structure and bank stabilization/revetment structure must be evaluated and problems addressed.

Report on the visual inspection of channel stability. Physical measurements of channel stability/morphology will not be required. Include a discussion of any deviations from as-built and an evaluation of the significance of these deviations and whether they are indicative of a stabilizing or destabilizing situation.

Michael's Branch is stabilized for the Year 3 Winter evaluation, except for, the areas noted below. NCDOT plans to live stake these eroded areas to help stabilize the streambanks. A bankfull event had occurred onsite since the last monitoring evaluation. NCDOT will continue to monitor Michael's Branch.

Date 3/1/10	STA. 15+30 -Y2- (Additional Photo)	STA. 5+90 -Ramp C- (Additional Photo)	Station Number	Station Number	Station Number
Structure Type	Crossvane	Crossvane			
Is water piping through or around structure?					
Head cut or down cut present?					
Bank or scour erosion present?	Erosion on left bank at the end of crossvane arm	Erosion on right bank behind right crossvane arm			
Other problems noted?					

Michael's Branch



Photo Point #1 (Upstream)



Photo Point #1 (Downstream)



Photo Point #2 (Upstream)



Photo Point #2 (Downstream)



Photo Point #3 (Upstream)



Photo Point #3 (Downstream)

Michael's Branch



Photo Point #4 (Upstream)



Photo Point #4 (Downstream)



Photo Point #5 (Upstream)



Photo Point #5 (Downstream)



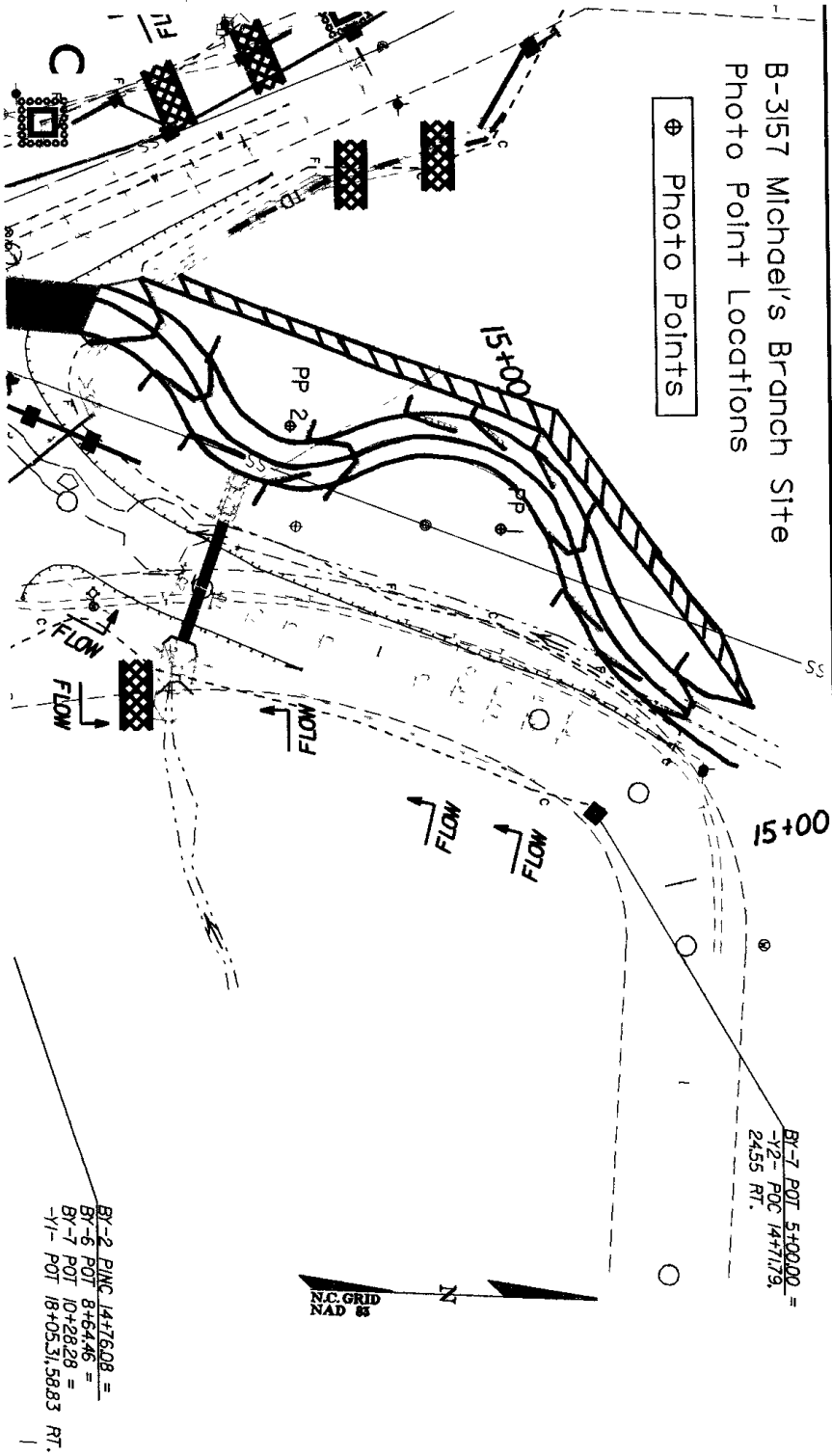
STA. 15+30 –Y2 – Erosion on left bank



STA. 5+90 –Ramp C–Erosion behind right arm of crossvane

B-3157 Michael's Branch Site Photo Point Locations

⊕ Photo Points



B-3157 Michael's Branch Site Photo Point Locations

◆ Photo Points

